A. Analysis of the Parent Tracer and Metabolites in Human and Nonhuman Primate Blood

The stability of [I-123]5-I-A-85380 in human and nonhuman blood was tested (Zoghbi et al 2001). In human or nonhuman primate whole blood as well as in plasma, the parent compound was stable for approximately 5 min, after which time it decomposed. The radioligand was stable in the injection solution and in protein-free (>30K M.W.) plasma ultrafiltrate for at least 18 h. To preserve the parent compound in plasma, the radioactive plasma needed to be mixed with equal volumes of acetonitrile within 5 min after its collection, or alternatively radioactive blood needed be collected and mixed with sodium azide (3 mg/mL blood). The in vivo metabolism of [I-123]5-I-A-85380 resulted in two components; a radioactive metabolite that was less lipophilic than the parent compound and a polar radioactive metabolite that was not free radioiodide because radioactivity did not accumulate in the thyroid gland.